Holly Allen

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Education

Rochester Institute of Technology *Aug 2020 – May 2024*
BS in Game Design and Development, Magna Cum Laude

- GPA: 3.6
- Dean's List
- **Immersion:** Mathematics
- **Student Organization:** Founded a student organization for LGBTQ+ students in STEM fields

Experience

Teaching Assistant *Rochester, NY*
RIT School of Interactive Games & Media *Jan 2023 - May 2024*

- Assisted professor with analyzing and critiquing student work for UI/UX, algorithmic problem solving, and data structures courses
- Provided workable feedback to students both inside and outside the classroom

Lead Technical Artist (Co-op) *Remote*
Xana Ad Hoc *May - Aug 2023*

- Managed team of twelve technical artists in improving the visuals and performance of a three-year-old student-run project
- Coordinated efforts to optimize the game which resulted in a 30 to 60 times increase in frame rates and a 1 GB decrease in file size
- Collaborated with the Aesthetics team to create standards for textures and models and to ensure cohesion for the game's VFX

Projects

PlayStation 5 Engine

- Created a 3D game engine on the PS5 alongside a team of students utilized by two teams in a production studio environment
- Implemented model and texture loading, materials, directional and point lighting, skyboxes, transparency, and a basic particle system
- Tools Used: PlayStation 5 Development Kit, C++

Painted World: Neo-Versailles

- Developed a capstone project with students at the ArtCenter College of Design in CA
- Contributed to the environmental scripting, inventory back-end, and debugging of code for the project
- Tools Used: C#, Unity Engine, Perforce, Confluence

Graphics Engine

- Ongoing project to create a graphics engine from scratch with the goal of working across multiple platforms
- Tools Used: DirectX 11, DirectX 12, Sharpmake

Skills

Languages: C++, C#, JavaScript, HLSL

Technologies: .NET, DirectX 11, DirectX 12, PlayStation 4 Development Kit, PlayStation 5 Development Kit, Unity Engine, Unreal Engine, Git, Perforce, Jira, Confluence

Mathematics: Linear Algebra, Discrete Mathematics, Calculus I & II, Statistics